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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/767,003 | 01/22/2001 | Jai-Yong Lee | A33889 | 1515 |
| 21003 | 7590 | 04/05/2005 | EXAMINER | |
| BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112 | | | WAHBA, ANDREW W | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2661 | |

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

09/767,003

Applicant(s)

LEE ET AL.

Examiner

Andrew W Wahba

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7 and 9 is/are rejected.
- 7) ☒ Claim(s) 8 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-5 and 7-10 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 3, 5 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al, hereinafter "Lee" (US Patent 6,456,604).

With regard to claim 1, Lee discloses a mobile communication system in which a dedicated MAC channel DMCH (DCCH) is a bi-directional channel used for medium access control message (MAC layer control). The channel is a one-to-one channel in the control hold state and in the active state (*collectively*, service option of the packet) for packet service (column 4, lines 12-16). A MAC layer control unit is inherent so as to transition between the control hold state, the active state and any other disclosed states. In a dormant state (packet burst mode), a CTCH (CTCH) is used for transmitting short data. In an active state (packet data mode), a DTCH (DTCH) is used for transmitting user data (transmitting the packet) (column 4, lines 21-28 and 48-51).

With regard to claim 2, Lee discloses a suspended state 119 (suspended state), in which the dedicated control channel and the dedicated traffic channel are released (column 5, lines 45-48). If data, however, is generated at the base station, the mobile terminal may resume an active state 117 (determine the service option) (column 6, lines 19-24).

With regard to claim 3, Lee discloses a dedicated MAC channel DMCH (DCCH) is a bi-directional channel used for medium access control message (MAC layer control) (column 4, lines 12-16).

With regard to claim 5, Lee discloses that if data to be transmitted (DTCH / transmitting) is generated at the base station is received from the terminal within T_{Normal} (control hold state timer) the base station establishes a dedicated traffic channel, notifies the terminal of this condition and transitions to active state 117 (active state) from sub-state 153 (column 6, lines 18-24). Lee further discloses that if no data is transmitted for a time T_{Active} , or timer of active state 117, that a transition occurs to the control hold state 115 (control hold state) (column 8, lines 28-33).

With regard to claim 7, Lee discloses that if no data is generated (DTCH is not allocated) at the end of time T_{Hold} in the control hold state 115, the dedicated control channel is released and the control hold state 115 transitions to a suspended state 119 (suspended state) (column 5, lines 34-39).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al, hereinafter "Lee" (US Patent 6,456,604).

With regard to claim 4, Lee does not expressly disclose if the DCCH is allocated before a suspended state timer is expired, transitioning the MAC control unit of the MS to a control hold state.

Lee, however, does disclose that if no data is generated at the end of time T_{Hold} in the control hold state 115, the dedicated control channel is released and the control hold state 115 (control hold state) transitions to a suspended state 119 (suspended state) (column 5, lines 34-39).

A person of ordinary skill in the art would have been motivated to perform the opposite transition from the suspended state 119 (suspended state) to the control hold state 115 (control hold state) so as to reassign control channels in the suspended state (column 6, lines 1-8). Accordingly, such a transition would occur before the allocation of any traffic channels. At the time the invention was made therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to obtain the invention as specified in claim 4.

With regard to claim 9, in the sub-state 153, if the user data to be transmitted or control data is not generated (DCCH is not allocated) for a set time T_{Save} (suspended state timer) the base station notifies the terminal and transits to suspended state 119 (suspended state) (column 6, lines 40-44).


Allowable Subject Matter

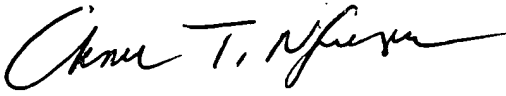
6. Claims 8 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew W Wahba whose telephone number is (571) 272-3081. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Wahba 
Patent Examiner
March 30, 2005


CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600